

Speaking of possibility and time
7th Workshop in Inferential
Mechanism and their Linguistic
Manifestation
Georg-August-Universität Göttingen,
June 4th, 2010

Modal Questions in Korean and Japanese

Yukinori Takubo & Sunmi Kim
Kyoto University, Miyazaki University
ytakubo@bun.kyoto-u.ac.jp,
kimsunmijp@ybb.ne.jp

1

Two morphemes for future in Korean: -keyss- and -(ul) kes-i

- -keyss- verbal affix
- (1) a. Nayil na-nun Seoul-ey ka-**keyss**-supni-ta.
Dynamic
tomorrow I-TOP Seoul-to go-keyss-HON-Ind
'I will go to Seoul tomorrow'
- b. Nayil-un pi-ka o-**keyss**-supni-ta. Epistemic
tomorrow-TOP rain-NOM come-keyss-HON-Ind
'It will rain tomorrow.'

2

- -(u)l kes-i future adnominal+formal noun+copula

- (2)a Nayil na-n Seoul-ey ka-**l kes-i**-pni-ta. (Dynamic)
tomorrow I-TOP Seoul-to go-l kes-i-HON-Ind
'I will go to Seoul tomorrow'
- b. Nayil-un pi-ka o-**l kes-i**-pni-ta. (Epistemic)
tomorrow-TOP rain-NOM come-l kes-i-HON-Ind
'It will rain tomorrow.'

3

Questions: dynamic

- (3) a. Nayil tangsin-un o-**keyss**-supni-kka?
tomorrow you-TOP come-keyss-HON-Q
'Are you coming tomorrow?'
- b. Nayil tangsin-un o-**l kes-i**-pni-kka?
tomorrow you-TOP come-l kes-i-HON-Q
'Are you coming tomorrow?'

4

Questions: Epistemic

- (4). (The speaker greets a farmer who is looking up at the sky)
- a Nayil pi-ka o-**keyss**-supni-kka?
tomorrow rain-NOM come-keyss-HON-Q
'Will it rain tomorrow?'
- b. *Nayil pi-ka o-**l kes-i**-pni-kka?
tomorrow rain-NOM come-l kes-i HON
'Will it rain tomorrow?'

5

Questions: Epistemic

- (5) *Mas iss-**ul ke**-pnikka?
taste-be-ul kes-i-HON-Q
'Is it tasty?'
- (6) *Kulen sayngkak(kipwun)-i tu-**l ke**-pnikka?
such thought (feeling)-NOM enter-l kes-i -HON-Q
'Do you feel that way?'
- (7) *Pwuca-i-**l ke**-pnikka?
Rich-be-l kes-i-HON-Q
'Is he rich?'

6

(8) *Aph-i poi-I **ke**-pnikka?

front-NOM be-seen-I kes-i-HON-Q

'Can you see before you?'

(9) *Soli-ka tulli-I **ke**-pnikka?

sound-NOM be heard-I kes-i-HON-Q

'Can you hear anything?'

7

Epistemic questions: -I kka- or -keyss- is used

(5)' a. Masiss-ul-kka-yo?

taste-be-I-kka-HON

b. Masiss-**keyss**-e-yo?

(6)' a. Kulen sayngkak(kipwun)-i **tul**-kka-yo?

such thought (felling)-NOM enter-I-kka-HON

b. Kulen sayngkak(kipwun)-i **tul**-**keyss**-e-yo?

(7)' a. Pwuca-i-I **kka**-yo?

rich-be-I kka-HON

b. Pwuca-i-**keyss**-e-yo?

8

(8)' a. Aph-i poi-I **kka**-yo?

front-NOM be_seen-I kka-HON

'Do you see before you?'

b. Aph-i poi-**keyss**-e-yo?

(9)' a. Soli-ka tulli-I **kka**-yo?

sound-NOM be_heard-I kka-HON

'Do you hear any sound?'

b. Soli-ka tulli-**keyss**-eyo?

9

Preliminary generalizations

- **-(u) kes-i** interpreted as dynamic modal can be questioned.
- **-(u) kes-i** interpreted as epistemic modal cannot be used in questions

10

Exceptions to the generalizations

(10) (To the president)

Kim-kwun-un chayyongtoy-I **ke**-pni-kka?

Kim-Mr.-TOP be-hired-I kes-i-HON-Q

'Will Mr. Kim be hired?'

(11) (A director to a playwright)

Ipen ye-cwuinkong-un ppalli cwuk-**ul** **ke**-pni-kka?

this_time female-heroine-TOP soon die-I kes-i-HON-Q

'Will the heroine die early this time?'

11

(12) Kangcaysep-ssi, mwe-ka mwe-nci molu-I

Kang Caysep-Mr. what-NOM what-COMP not_know-I

ke-pni-kka.

kes-i-HON-Q

'You have no idea what's happening, haven't you, Mr.Kang?' (네티즌 의견] idkks29. 2008/3/23.)

(13) No Yunho-ssi, tto aphu-I kepnikka?

No-Yunho-Mr. again be-sick-I kes-i-HON-Q

'Will you be sick again, Mr. No?' [정윤호 사진 한 장의 감동] 쌍쌍이2. 2007/10/29.

12

Generalization (revised)

- **-(u)l kes-i** interpreted epistemically can be questioned when the addressee has the power to decide what the future will be, otherwise it cannot.

13

English modals

Deontic must

- (14) a. You must be here at seven.
b. Must I be here at seven?

Epistemic must

- (15) a. It must rain tomorrow.
b. ??Must it rain tomorrow?

14

Japanese modals

beki-da (should): Deontic

- (16) a. Kare-wa kono kenkyuu-o yameru **beki-desu**.
He-TOP this research-ACC stop should-HON
'He should stop this research.'
b. Kare-wa kenkyuu-o yameru **beki-desu-ka?**.
He-TOP research-ACC stop should-HON-Q
'Should he stop this research?'

15

hazu-da (must), ni tigainai(must) : Epistemic

- (17) a. Asita-wa ame-ga huru-**hazu**-desu.
tomorrow-TOP rain-NOM fall-must-COP_HON.
'It must rain tomorrow.'
b. ??Asita-wa ame-ga huru-**hazu**-desu-ka?.
tomorrow-TOP rain-NOM fall-must-COP_HON-Q.
'Must it rain tomorrow?'
(18) a. Asita-wa ame-ga huru-**nitigainai**-desu.
tomorrow-TOP rain-NOM fall-must-COP_HON.
'It must rain tomorrow.'
b. ??Asita-wa ame-ga huru-**nitigainai**-desu-ka?
'Must it rain tomorrow?'

16

Epistemic possibility

- (19) a. It can rain tomorrow.
b. Can it rain tomorrow?

(20)

- a. Asita-wa ame-ga huru-**kamosirenai-desu**
tomorrow-TOP rain fall-be_possible_HON.
'It may rain tomorrow.'
b. Asita-wa ame-ga huru-**kamosirenai-desu** ka?
tomorrow-TOP rain-NOM fall-be_possible-HON-Q
'Could it rain tomorrow?'

17

- Necessity modals cannot be used for questions. Possibility modals can.

- **-(u)l kes-i** is a necessity modal

18

Meaning of (u)l-kes-i as pre-determined future

Intuition of Koreans: \sim -ul kes-i-pni-kka \Rightarrow \sim ki lo toy-e iss-upni-kka koto ni natteiru-ka (it is pre-determined that \sim)

- (21) Asita-wa ame-ga huru-koto-ni nattei-masu-ka.
tomorrow-TOP rain-NOM fall-it_is_pre-determined-HON-Q
'Is it pre-determined that it will rain tomorrow?'
- (22) Kondo-no hiroin-wa hayaku sinu-koto-ninattei-masu-ka.
this_time-GEN heroine-TOP early die-it_is_pre-determined-HON-Q
- (23) Nayil-un pi-ka o-kilo toy-e iss-supni-kka?
- (24) Ipen ye-cwuinkong-un ppalli cwuk-kilo toy-e issupnikka?
- (21)-(24) can only be uttered truthfully by someone who can control the future

19

Problems with taking -l kes-i as predetermined future

Affirmative form of -l kes-i cannot be interpreted as ' \sim ki lo toy-e iss-ta.' (25) only express an intelligent guess and (26) a prediction.

- (25) Nayil pi-ka o-l kes-ita.
- (26) Ipen ye-cwuinkong-un ppalli cwuk-ul kes-ita.
- Why the question form of -k kes-i is interpreted as ' \sim ki lo toy-e iss-ta' itself is a problem that should be addressed.

20

Meaning of questions

- Hamblin : set of possible answers
 - (Karttunen): set of true answers to the question)
- Illocutionary force: Request to give the (true) answer

Presupposition: there are more than two possible answers and the speaker does not know which one is true (true question)

21

possibility modal

Both $\Sigma \cup p$ and $\Sigma \cup \neg p$ are consistent, where Σ is the present knowledge state of the speaker

- (27) Asita-wa ame-ga huru-kamosirenai-si, huranai-kamosirenai.
- (28) Nayil-un pi-ka o-l swu-to iss-ko an o-l swu-to iss-ta.
- (29) Asita ame-ga huru-ka, huranai-ka siranai.
- (30) Nayil pi-ka o-l-ci ette-l-ci molu-n-ta.

22

Necessity modal cannot be negated

p-nitigainai: Σ is compatible only with p and $\neg p$ is not compatible with Σ .

Conjunction of polarity differing sentences with necessity modals is not possible

- (31) *Asita ame-ga huru-nitigainai-si, hur-anai-nitigainai.
tomorrow rain-NOM fall-must-and fall-not-must
'It must and must not rain tomorrow.'

23

Necessity modals cannot be negated

- (32) *?Asita ame-ga huru-nitigainaku-nai.
tomorrow rain-NOM fall-nitigainai-NEG.
- (33) *?Asita ame-ga huru-hazu de-nai.
- (34) *?Asita ame-ga huru-nitigainaidesuka,
Tomorrow rain-NOM fall-nitigainai-HON-Q
tigainakunaidesuka.
tigainai-HON-Q
- (35)* ?Asita ame-ga huru-hazudesuka, huru-hazudenaidesuka.

24

Possible question forms of necessity modal sentences : meta-questions about the current state

- (36) Ame-ga huru-**nitigainai-n**-desu-ka.
rain-NOM fall-must-NO-COP_HON-Q
- (37) Ame-ga huru-**hazu-na-n**-desuka.
rain-NOM fall-should-NO-COP_HON-Q

no~n : nominalizer or complementizer,

25

The function of **no-da**

(38) [Δ [Ame-ga hutta]-**n-da**]

Δ is a slot for a contextually given topic which the sentences are about.

-no da causes the sentence it is attached to to be interpreted as an abductive proposition or a meta-question about the current state.

P no-da: Δ because p.

26

Δ can be nonlinguistic.

(39) (seeing the addressee putting on the jacket that he had taken off)

Samui-n-da.

is_cold-NO-COP

'(he puts your jacket on because) he is feeling cold?'

27

Δ are usually linguistically given for modals+no-da:

(I say S1 because) S2

(40) Kyoo sentakumono-o hosanai-hoo-ga ii.
today laundry-ACC dry_not-be_better

'You might as well not dry the laundry.'

Ame-ga huru-nitigainai-n-da.

'(I say this because) it must rain.'

28

Necessity modal+**no-ka** as a meta-question

- (41) a Kyoo sentakumono-o hosanai hoo-ga-ii-yo.
today laundry-ACC dry-not-it_is_better-SFP
- b. Ame-ga huru-nitigainai-**n**-desu-ka?
rain-NOM fall-nitigainai-NO-COP_HON-Q

(42) 'Kyoo sentakumono-wo hosanai-ho-ga ii' toiu-no-wa, 'Ame-ga huru-nitigainai' kara-desuka.

You say 'It is better not to dry the laundry today' because (you think) it must rain today.

29

no-ka as abductive questions

- (43) a. It is better not to dry the laundry when it is raining.
- b. It is better not to dry the laundry when is windy.
- c. It is better not to dry the laundry when the yellow sand is expected to fall.

When the addressee says 'it is better not to dry the laundry' the speaker can abductively guess that (a) is the ground on which she based her statement and say "ame-ga huru nitigainai no ka.'

30

- Modals for epistemic necessity can usually be questioned meta-linguistically, i.e. as a question for asking about the possible ground for the remark that the addressee has just made: You say S1 because must (p).

31

Question with evidential modals

Evidential modals can be questioned without 'no' added.

Questioning sentences with an evidential modal ask what the current situation and are interpreted abductively: Is the current world like $\Sigma \cup \{p\}$ or like $\Sigma \cup \{\neg p\}$.

(44) Asita ame-ga huru-mitai-kai.

(45) Nayil pi-ka o-I kes kath-supni-kka?

32

Abductive questions with -nun kes-i / -n kes-i

-nun kes-i : present adnominal+kes+copula

(46) (seeing someone taking out his umbrella)

Pi-ka o-nun kepnikka?

Ame-ga hutteiru-n-desuka.

-n kes-i: past adnominal+kes+copula

(47) (After noticing that the ground is wet)

Pi-ka o-n ke-pni-kka?

Ame-ga hutta-n-desuka.

33

- unlike **-nun kes-i** or **-n kes-i**, **-I kes-i** cannot usually be used abductively as a meta-linguistic questions. Because of the meaning of future adnominal form **-I**, the abductive interpretation must be coerced.
- If **S-I kes-i** is coerced to be interpreted as a metalinguistic abductive questions, then it must be interpreted as being about the current situation: Is the current situation such that it must be the case that S will be the case.

Conclusion

- 1. Such epistemic modals expressing necessity a **I-kes-i** in Korean, **hazu-da**, **nitigainai** in Japanese cannot be questioned.
- 2. **S hazuda**, **S nitigainai** can be made into a question adding 'no-da' and making them into a meta-linguistic question, i.e. a question asking the ground for the current situation. **-I-kes-i** cannot usually be used as a meta-linguistic question.
- 3. **-I kes-i Q** can be coerced to be interpreted as a metalinguistic question, in which case the interpretation must be abductive, i.e. it must be interpreted as asking if the current situation is such that it must be the case that it will be S.

35

References

- Karttunen, L. 1979. Syntax and semantics of questions. *Linguistics and Philosophy* 1, 3-44.
- Groenendijk, J. and M. Stokhoff. 1984. Studies on the semantics of questions and the pragmatics of answers. PhD thesis, University of Amsterdam.
- Hamblin, C. 1973. Questions in Montague English. *Foundation of Language* 10. Reprinted in: B. Partee (ed.) (1976). *Montague Grammar*, New York, Academic Press.
- Kuno, Susumu 1973. Structures of Japanese MIT Press
- Saito, Manabu 2006. Sizengongo no syooko suiryooto tisiki kanri (Evidential reasoning and knowledge management). Ph.D. dissertation, Kyushu University.

36

Takubo, Y. 1985. On the scope of negation and question in Japanese. *PJL*. 10, 87-115.

Takubo, Y. 2007. Two types of modal auxiliaries in Japanese: two directionalities in inference. In: McGloin, N. et al. (eds.) *Japanese/Korean Linguistics 15*. Center for the Study of Language and Information, Stanford, 440-451.

Takubo, Y. 2009. Conditional modality: Two types of modal auxiliaries in Japanese. Pizziconi, B. and M. Kizu (eds.) *Revisiting Japanese Modality: Exploring its Scope and Interpretation*, Palgrave Macmillan.

37

田窪行則、金善美. 2009. 韓国語と日本語のモダリティ表現の対照 (한국어와 일본어의 모다리티퍼현의 대조) 『韓国語と日本語のモダリティ表現の対照』油谷幸利先生還暦記念論文集刊行編集委員会編『朝鮮半島のことばと社会——油谷幸利先生還暦記念論文集』掲載 明石書店)298-312

金善美、田窪行則、鄭聖汝、千田俊太郎 2008. “을 것”이 나타내는 추측의 성질에 대하여 - 의문문의 제약의 관점에서 - ’ (『ul kes가表す推測の性質について - 疑問文の制約の観点から - 』『社団法人韓国言語学会2008年度冬季学術大会資料集』: 91-101. 社団法人韓国言語学会.

38